UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>09 July 2007</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-11</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-11</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

    1. ☐ Certified copies of the priority documents have been received.

    2. ☐ Certified copies of the priority documents have been received in Application No. _____.

    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to applicant's amendment filed on July 09, 2007.

Claims 1-11 are pending in the present application.

Response to Arguments

2.   Applicant's arguments with respect to **claims 1-11** have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4.   Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in

the relevant art that the inventor(s), at the time the application was filed, had possession

of the claimed invention.

Claim 9 recites the limitations "a computer program embodied in a computer

readable medium" on lines 1-2. It is not clear and adequately disclosed how the above

limitation is carried as per the originally filed specification. This constitutes new matter

in the claims, as the limitations are not supported by the original disclosure.

Claim Rejections - 35 USC § 103

5.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

6.   Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Lundin, U.S. Publication Number 2001/0003093 A1 (hereinafter Lundin), and further

in view of **Favichia et al., U.S. Patent Number 6,125,122 (hereinafter Favichia)**.

Regarding claims 1 and 5, Lundin teaches a system (see Fig. 2) and a method

(see Fig. 5) for obtaining the position of a mobile station (16) located in a current

network of a communications system including a plurality of networks (i.e. local PLMN

47 and remote PLMN 50) supporting different positioning protocols (see p. 2 [0022], p. 3

[0023], p. 4 [0028] and Figs. 1, 2 & 5), comprising: identifying at a location center (MPC

52 or MPC 60) the current network (i.e. local PLMN 47 or remote PLMN 50) of said

mobile station (16) (see p. 2 [0022], p. 3 [0025] and p. 4 [0028]), and based on said

identified current network (6), using a suitable positioning protocol for communication of

location information with said current network (6) (108) (see p. 3 [0025-0026] and p. 4

[0028-0029]).

Lundin fails to explicitly teach selecting among at least two protocols based on

said identified current network.

In an analogous field of endeavor, Favichia teaches a dynamic protocol

negotiation system, wherein two intelligent nodes are provided with the capability of

negotiating a protocol between them so that if the intelligent nodes operate at two

different protocols then they can select a protocol appropriate for their communication

(see abstract). According to Favichia, as an example, suppose that in Fig. 1 HLR 11, in

a preferred node operates at IS-41 Rev. C but can operate at earlier revisions (e.g., A

and B) and MSC 22, in a preferred node operates at IS-41 Rev. A, and assume that a

mobile station in the New York region registers with the MSC 22, that node sends

information to HLR 11 in Seattle identifying that it operates at protocol version A (see

col. 3, lines 46-64 and Fig. 1). Favichia, further teaches at that point since Rev. C is a

later (or higher) version of the protocol, HLR 11 can either send a message back

identifying the highest protocol version at which it can operate, or instead to save

registration time it can simply select Rev. A as the appropriate protocol level since,

being a lower protocol level it can be implemented by MSC 22 for communication (see

col. 3, line 65 through col. 4, line 4).

Additionally, Lundin teaches the use of a plurality of protocols, such as a

positioning roaming protocol (PRP), IP based protocols, frame relay, ATM protocols

e.t.c, for supporting internetworking roaming and offering positioning services; and

further teaches a mobile positioning center (MPC) tailors position information based on

an underlying protocol according to a particular system or network requirement (see p. 3

[0023] and p. 4 [0028-0029]).

It would therefore have been obvious to one of ordinary skill in the art at the time

of the invention to modify Lundin with the teachings of Favichia, to include a method of

selecting among at least two protocols based on said identified current network, in order

to provide a method by which intelligent nodes in different geographical regions

operating at different protocols can communicate with one another while reducing the

likelihood of losing data or creating some mishandling of information as taught by Favichia (see abstract and col. 2, lines 51-54).

Regarding claim 2, Lundin in view of Favichia teaches all the limitations of claim 1. Lundin in view of Favichia further teaches a method, where before identifying the current network of the mobile station, the method further comprises: receiving at said location center a positioning request (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]), identifying the subscriber's home network, based on said identified home network (see *Lundin,* p. 2 [0022], p. 3 [0025] and p. 4 [0028]), selecting a suitable positioning protocol for communication with said home network (see *Lundin,* p. 3 [0023 & 0025] and p. 4 [0028-0029] and *Favichia,* col. 3, line 46 through col. 4, line 4), sending a routing information request to the home network, receiving an answer from the home network, and analyzing the answer for identifying the current network of the mobile station (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]).

Regarding claim 3, Lundin in view of Favichia teaches all the limitations of claim 1. Lundin in view of Favichia further teaches a method, further comprising: sending a position information request to the current network, and receiving an answer including location information about the subscriber from the current network (*see Lundin,* p. 2 [0022], p. 3 [0026] and p. 4 [0028]).

Regarding claim 4, Lundin in view of Favichia teaches all the limitations of claim 1. Lundin in view of Favichia further teaches a method, wherein any of the SS7 protocol, MLP or IP roaming protocol is selected (*see Lundin,* p. 3 [0023 & 0025] and p. 4 [0028-0029]).

Regarding claim 6, Lundin in view of Favichia teaches all the limitations of claim 5. Lundin in view of Favichia further teaches an apparatus, further comprising: a receiving component and a sending component, wherein said receiving component is configured to receive a positioning request from an location services (*see Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]), wherein said processing component is configured to identify a home network for the subscriber; and based on said identified home network (*see Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]), select a suitable positioning protocol from said positioning protocols for communication with said home network (*see Lundin*, p. 3 [0023 & 0025] and p. 4 [0028-0029] and *Favichia*, col. 3, line 46 through col. 4, line 4), said sending component is configured to send a routing information request to the home network, said receiving component is configured to receive an answer from the home network, and said processing component is configured to analyze the answer for identifying the current network of the mobile station (*see Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]).

Regarding claim 7, Lundin in view of Favichia teaches all the limitations of claim 5. Lundin in view of Favichia further teaches an apparatus, characterised in that said sending component is configured to send a routing information request to the visited network, and said receiving component is configured to receive an answer including location information about the roaming subscriber from the visited network (*see Lundin*, p. 2 [0022], p. 3 [0026] and p. 4 [0028]).

Regarding claim 8, Lundin in view of Favichia teaches all the limitations of claim 5. Lundin in view of Favichia further teaches an apparatus, wherein said positioning

protocols are any of the SS7 protocol, and/or GMLC-centric IP roaming protocol and/or

location middleware IP roaming protocol (*see Lundin,* p. 3 [0023 & 0025] and p. 4

[0028-0029]).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7.   Claims 9, 10 and 11 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter as follows:

Claim 9 recites *"a computer program embodied in a computer readable*

medium ..." and claims 10 and 11 recites *"computer program on a carrier and*

comprising computer executable instructions for causing a computer ... wherein

said carrier is a record medium, computer memory, read-only memory or an

electrical carrier signal" implies a "signal" *modulated/encoded/embodied on a carrier*

wave/etc. (as defined on page 8, lines 29-38 of the specification) with functional

descriptive material. While functional descriptive material may be claimed as a

statutory product (i.e., a "manufacture") when embodied on a tangible computer

readable medium, a "signal" per se does not fall within any of the four statutory classes

of 35 U.S.C. §101. A "signal" is not a process because it is not a series of steps per

se. Furthermore, a "signal" is not a "machine", "composition of matter" or a

"manufacture" because these statutory classes "relate to structural entities and can be

grouped as 'product' claims in order to contrast them with process claims." (1 D.

Chisum, Patents § 1.02 (1994)). Machines, manufactures and compositions of matter

are embodied by physical structures or material, whereas a "signal" has neither a

physical structure nor a tangible material. That is, a "signal" is not a "machine"

because it has no physical structure, and does not perform any useful, concrete and

tangible result. Likewise, a "signal" is not a "composition of matter" because it is not

"matter", but rather a form of energy. Finally, a "signal" is not a "manufacture" because

all traditional definitions of a "manufacture" have required some form of physical

structure, which a claimed signal does not have.

> A "manufacture" is defined as "the production of articles for use from raw
> materials or prepared materials by giving to these materials new forms, qualities,
> properties, or combinations, whether by hand-labor or by machinery." Diamond
> v. Chakrabarty, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980) (quoting
> American Fruit Growers, Inc. v. Brogdex Co., 283 U.S. 1, 11, 8 USPQ 131, 133
> (1931).

Therefore, a "signal" is considered non-statutory because it is a form of energy,

in the absence of any physical structure or tangible material, that does not fall within any

of the four statutory classes of 35 U.S.C. §101.

NOTE: Refer to Annex IV, section (c) of the USPTO "Interim Guidelines for

Examination of Patent Applications for Patent Subject Matter Eligibility", Official Gazette

notice of 22 November 2005 (currently at

http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm).

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony S. Addy whose telephone number is 571-272-7795. The examiner can normally be reached on Mon-Thur 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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